

ABSTRACT OF THE DISCLOSURE

Nucleic acid sequence including: $P_x - S_x - B_n - (ZR) - \text{Hir}(As_mR) - \text{protein}(Y) - T$. P_x is a promoter sequence. S_x is a nucleic acid encoding a signal sequence or leader sequence. B_n is 1-15 codons, when n is an integer from 1 to 15, or a chemical bond, when $n = 0$. Z is a codon for lysine or arginine. R is an arginine codon or a chemical bond. Hir is a nucleic acid sequence coding for hirudin or hirudin derivative which is at least 40% homologous to a natural hirudin isoform. As_m is a chemical bond, when $m = 0$, or 1-10 codons, when m is an integer from 1 to 10. $\text{Protein}(Y)$ is a nucleic acid sequence encoding a protein that is produced in and secreted by yeast. T is an untranslated expression-enhancing nucleic acid sequence. Proteins thereof, plasmids thereof, multicopy vectors thereof, host cells thereof, and processes thereof.

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